DIPPING EFFECT OF *Spirulina platensis* EXTRACT AS IMUNOSTIMULANT TO THE AMOUNT OF LEUCOCYTES AND TYPE COUNT OF LEUCOCYTE GURAME FISH (*Osphronemus goramy*) INFECTED WITH *Aeromonas hydrophila*

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ABSTRACT

The Purpose of this research was to find out the potency of the extract of *Spirulina platensis* as immunostimulant on the amount of leucocyte and numbered kind of leucocyte of gurame fish that infected by *Aeromonas hydrophila* bacteria. Twenty gurame fish with weight of 20 grams and length of 9 – 10 cm randomly divided into 5 groups. P0(-) as negative control was not submerged by the extract of *Spirulina platensis* and was out infected of *Aeromonas hydrophila* bacteria. P0(+) as positive control was not submerged in extract of *Spirulina platensis* but infected by aeromonas hydrophila $10^6$ cell/ml. The first submersion was done on the first day for three hours, and the second submersion was done on 7th day for three hours, and then after 24 hours infected by *Aeromonas hydrophila* $10^6$ cell/ml. The blood of fish were taken on 4th day after infected, to examine the blood using calculation room and blood smear. Data would be analyzed by using analysis of variant (ANOVA). If there were any significant different between the treatment, analysis continued by using computer software SPSS 18 for windows. The result of the research showed that the extract of *Spirulina platensis* could increase the amount of leucocyte, neutrophil, and monocyte of gurame fish.

**Keywords:** *Spirulina platensis*, *Aeromonas hydrophila*, amount and leucocyte appearance, fish blood.